



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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GAF Materials Corporation
1361 Alps Road
Wayne, NJ 07470

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA – Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF Liberty™ SBS Self-Adhering Modified Bitumen Roofing Systems Over Steel Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA No. 09-0324.13 and consists of pages 1 through 10.
The submitted documentation was reviewed by Jorge L. Acebo.



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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Deck Type: Steel
Material: SBS
Maximum Design Pressure: -97.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

| Product | Dimensions | Test Specification | Product Description |
|---|--------------------------|----------------------------|---|
| Liberty™ SBS Self-Adhering Base/Ply Sheet | 39.375" x 66' | ASTM D 6163 ASTM D 5147 | Self-Adhered, SBS modified, fiberglass reinforced membrane for base or ply sheet applications. |
| Liberty™ MA Mechanically Attached SBS Base Sheet MA | 39.375" x 66' | ASTM D 4601, Type II | Mechanically attached, SBS modified, fiberglass reinforced base sheet. |
| Liberty™ SBS Self-Adhering Cap Sheet | 39.375" x 34' | ASTM D 6162 ASTM D 5147 | Self-adhering, SBS modified, polyester / fiberglass composite reinforced cap sheet |
| RUBEROID® SBS Heat-Weld™ Granule | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules. |
| RUBEROID® SBS Heat-Weld™ Smooth | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced. |
| RUBEROID® SBS Heat-Weld™ 170 FR | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules. |
| RUBEROID® SBS Heat-Weld™ Plus | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules. |
| RUBEROID® SBS Heat-Weld™ Plus FR | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules. |



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| Product | Dimensions | Test Specification | Product Description |
|--|--------------------------|--|---|
| RUBEROID® SBS Heat-Weld™ 25 | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced. |
| RUBEROID® Torch Smooth | 39.37" (1 meter) wide | ASTM D 6164 ASTM D 5147 | Heavy duty, polyester reinforced, asphalt modified bitumen membrane. |
| RUBEROID® Torch Granule | 39.37" (1 meter) wide | ASTM D 6222 ASTM D 5147 | Asphalt impregnated, coated felt, surfaced with mineral granules. |
| RUBEROID® 170 FR Torch | 39.37" (1 meter) wide | ASTM D 6222 ASTM D 5147 | Non-woven polyester mat coated with fire retardant polymer modified asphalt surfaced with mineral granules. |
| RUBEROID® EnergyCap™ SBS Heat Weld Plus FR | 39.37" (1 meter) wide | ASTM D 6164 | Fire retarding modified bitumen |
| RUBEROID® EnergyCap™ Torch Granule FR | 39.37" (1 meter) wide | ASTM D 6222 | Fire retarding modified bitumen |
| RUBEROID® EnergyCap™ Torch Plus FR | 39.37" (1 meter) wide | ASTM D 6222 | Fire retarding modified bitumen |
| RUBEROID® Torch FR | 39.37" (1 meter) wide | ASTM D 6222 ASTM D 5147 | Non-woven polyester mat coated with fire retardant polymer modified asphalt surfaced with mineral granules. |
| RUBEROID® Torch Plus | 39.37" (1 meter) wide | ASTM D 6222 ASTM D 5147 | Heavy duty, polyester reinforced, asphalt modified bitumen membrane. |
| RUBEROID® EnergyCap™ APP 250 FR | 39.6" (1 meter) wide | ASTM D 6222 ASTM D 5147 ASTM E 903 ASTM E 408 | Fire-retarding modified bitumen membrane with a factory applied layer of Topcoat® EnergyCote™ elastomeric coating. |
| GAFGLAS® Mineral Surfaced Cap Sheet | 39.37" (1 meter) wide | ASTM D 3909 | Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules. |
| GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet | 39.4" (1 meter) wide | ASTM D 3909 ASTM E 903 ASTM E 508 | Mineral surfaced cap sheet surfaced with extra fine granules and a factory applied layer of Topcoat® EnergyCote™ elastomeric Coating. |



| Product | Dimensions | Test Specification | Product Description |
|---|-------------------|---|---|
| Leak Buster™ Matrix™ 322 Elastomeric Roof Coating | 5, 55 gallons | ASTM D 1653, ASTM D 412, ASTM E 470, ASTM D 6038 | Styrene, acrylic based roof coating. |
| Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane | 5, 55 gallons | ASTM D 412, ASTM B 117, ASTM C 794, ASTM G 21, FTMS 141.6271, ASTM D 21, ASTM D 1475, ASTM E 1644 | Surface coating for smooth surfaced and mineral surfaced roofs. |
| Leak Buster™ Matrix™ 715 MB Elastomeric Roofing Membrane | 5, 55 gallons | ASTM D 412, ASTM D 21, ASTM D 1475, ASTM E 1644 | Surface coating for smooth surfaced and mineral surfaced roofs. |
| Topcoat® MB Plus | 5, 55 gallons | ASTM D 412, ASTM D 21, ASTM D 1475, ASTM E 1644 | Water-based, low VOC, sprayable polymeric liquid, which cures to form a seamless rubber membrane. |
| Topcoat® Surface Seal SB | 5, 55 gallons | ASTM D 412, ASTM B 117, ASTM C 794, ASTM G 21, FTMS141.6271, ASTM D 21, ASTM D 1475, ASTM E 1644 | Solvent-based, sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane. |

APPROVED INSULATIONS:

TABLE 2

| Product Name | Product Description | Manufacturer (With Current NOA) |
|--|----------------------------------|--|
| EnergyGuard™ PolyIso | Polyisocyanurate foam insulation | GAF Materials Corp. |
| EnergyGuard™ RA, EnergyGuard™ RN, EnergyGuard™ Ultra | Polyisocyanurate foam insulation | GAF Materials Corp. |
| Dens Deck® | Water-resistant gypsum board | Georgia-Pacific |
| DensDeck® DuraGuard™ | Modified Gypsum Roof Board | Georgia-Pacific |



APPROVED FASTENERS:**TABLE 3**

| Fastener Number | Product Name | Product Description | Dimensions | Manufacturer (With Current NOA) |
|------------------------|--|---|-------------------|--|
| 1. | Drill-Tec™ #12 Standard & #14 HD Roofing Fasteners | Insulation fastener for steel, wood & concrete decks. | various | GAF Materials Corp. |
| 2. | Drill-Tec™ Extra Heavy duty # 15 Roofing Fasteners (XHD) | Self tapping coated screw w/#3 Phillips head | various | GAF Materials Corp. |
| 3. | Drill-Tec™ ASAP | Pre-assembled fasteners and metal and plastic plates. | various | GAF Materials Corp. |
| 4. | Drill-Tec™ Plastic Polypropylene Plates | Round Polypropylene plate. | 3" & 3-½" round | GAF Materials Corp. |
| 5. | Drill-Tec™ Metal Insulation Plates | Round galvalume plate. | 3" & 3-½" round | GAF Materials Corp. |

EVIDENCE SUBMITTED:

| Test Agency/Identifier | Name | Report | Date |
|-----------------------------------|-------------|----------------|-------------|
| Factory Mutual Research Corp. | 4470 | 3024805 | 11/20/06 |
| Trinity ERD | ASTM D 6164 | G6850.08.08 | 08/29/08 |
| | ASTM D 6222 | G6850.11.08 | 11/05/08 |
| | ASTM D 6222 | G6850.10.08 | 10/06/08 |
| | ASTM D 3909 | G6850.08.07-1 | 08/13/07 |
| | ASTM D 3909 | G30250.02.10-3 | 02/15/10 |
| Exterior Research and Design, LLC | ASTM D 5147 | 18034.03.03-2 | 04/23/03 |



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APPROVED ASSEMBLIES:

Deck Type 1I: Steel, Insulated

Deck Description: Min. 22 gauge, Type B, wide rib steel deck is secured to minimum 1/4" thick structural steel supports spaced maximum 6' o.c. using two ICH Traxx/5 fasteners spaced 6" o.c. along each support. Deck side laps fastened with ICH Traxx/1 fasteners spaced maximum 24" o.c.

System Type C(1): Insulation is mechanically attached through loose laid insulation & optional thermal barrier to the deck. Membrane fully or partially adhered.

(Optional) Thermal Barrier: Min. 1/2" Dens Deck® or Min. 3/4" EnergyGuard™ Perlite is loose laid over the deck.

All General and System Limitations apply.

One or more layers of any of the following insulations.

| Base Insulation Layer | Insulation Fasteners (Table 3) | Fastener Density/ft ² |
|--|-----------------------------------|-------------------------------------|
| EnergyGuard™ PolyIso, EnergyGuard™ RA, EnergyGuard™ RN, EnergyGuard™ Ultra Minimum 2" thick | N/A | N/A |

Note: Base Insulation layer & Optional thermal barrier are loose laid over the deck and simultaneously mechanically attached with the top layer of the insulation. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

| Top Insulation Layer | Insulation Fasteners (Table 3) | Fastener Density/ft ² |
|--|-----------------------------------|-------------------------------------|
| DensDeck® DuraGuard™ Minimum 1/4" thick | 2 & 5 | 1:1.33 |

Note: Top layer of insulation is adhered to the base layer of insulation with OlyBond500™ Adhesive Fastener applied in serpentine pattern with a minimum 3/4" wide ribbons spaced max. 12" o.c. prior to the fastening of the top layer of insulation to the deck. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: Liberty™ SBS Self-Adhering Base/Ply Sheet, self-adhered with minimum 3" wide laps and rolled with a weighted roller.

Ply Sheet: (Optional) One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet, self-adhered with minimum 3" wide laps and rolled with a weighted roller.

Membrane: One or more layers of RUBEROID® SBS Heat-Weld™ 25, RUBEROID® SBS Heat-Weld™ Smooth, RUBEROID® SBS Heat-Weld™ Granule, RUBEROID® SBS Heat-Weld™ 170 FR, RUBEROID® SBS Heat-Weld™ Plus FR, RUBEROID® SBS Heat-Weld™ Plus, RUBEROID® EnergyCap™ SBS Heat Weld Plus FR, RUBEROID® Torch Smooth, RUBEROID® Torch Granule, RUBEROID® EnergyCap™ Torch Granule FR, RUBEROID® 170 FR Torch, RUBEROID® Torch FR, RUBEROID® Torch Plus, RUBEROID® EnergyCap™ Torch Plus FR or RUBEROID® EnergyCap™ APP 250 FR, with minimum 3" wide laps and applied according to manufacturer's application instructions.



Surfacing: (Optional, required over RUBEROID® Torch Smooth, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth) Install one of the following:

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715, Leak Buster™ Matrix™ 322, TOPCOAT® MB Plus, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -97.5 psf (See General Limitation # 7)



Deck Type 1I: Steel, Insulated

Deck Description: Min. 22 gauge, Type B, wide rib steel deck is secured to minimum 1/4" thick structural steel supports spaced maximum 6' o.c. using two ICH Traxx/5 fasteners spaced 6" o.c. along each support. Deck side laps fastened with ICH Traxx/1 fasteners spaced maximum 24" o.c.

System Type C(2): Insulation is mechanically attached through loose laid insulation & optional thermal barrier to the deck. Membrane fully or partially adhered.

(Optional) Thermal Barrier: Min. 1/2" Dens Deck® or Min. 3/4" EnergyGuard™ Perlite is loose laid over the deck.

All General and System Limitations apply.

One or more layers of any of the following insulations.

| Insulation Layer | Insulation Fasteners (Table 3) | Fastener Density/ft ² |
|--|-----------------------------------|-------------------------------------|
| EnergyGuard™ PolyIso, EnergyGuard™ RA, EnergyGuard™ RN, EnergyGuard™ Ultra Minimum 2" thick | 1 & 5 | 1:1.45 |

Note: Optional thermal barrier is loose laid over the deck and simultaneously mechanically attached with the insulation layer. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: Liberty™ SBS Self-Adhering Base/Ply Sheet, self-adhered with minimum 3" wide laps and rolled with a weighted roller.

Ply Sheet: (Optional) One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet, self-adhered with minimum 3" wide laps and rolled with a weighted roller.

Membrane: One or more layers of RUBEROID® SBS Heat-Weld™ 25, RUBEROID® SBS Heat-Weld™ Smooth, RUBEROID® SBS Heat-Weld™ Granule, RUBEROID® SBS Heat-Weld™ 170 FR, RUBEROID® SBS Heat-Weld™ Plus FR, RUBEROID® SBS Heat-Weld™ Plus, RUBEROID® EnergyCap™ SBS Heat Weld Plus FR, RUBEROID® Torch Smooth, RUBEROID® Torch Granule, RUBEROID® EnergyCap™ Torch Granule FR, RUBEROID® 170 FR Torch, RUBEROID® Torch FR, RUBEROID® Torch Plus, RUBEROID® EnergyCap™ Torch Plus FR or RUBEROID® EnergyCap™ APP 250 FR, with minimum 3" wide laps and applied according to manufacturer's application instructions.



- Surfacing:** (Optional, required over RUBEROID® Torch Smooth, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth) Install one of the following:
1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
 2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
 3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
 4. Leak Buster™ Matrix™ 715, Leak Buster™ Matrix™ 322, TOPCOAT® MB Plus, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
 5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
 6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: -60 psf (See General Limitation # 7)



STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gauge attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



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